

Work Order ID 153435

Monday, November 21, 2016 11:36:04 AM

153435

Offshore

Page 1

Item ID: D412-630-034

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 11/21/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 12/5/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: **DAS 21** Date: **NOV 22 2016**

Cooling:

Date:

Run Start

NR1QC: **9-89**

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

IIN D412-630

Rev O

FEB 08 2017

0.00

100

Document Control

100

DC

DOCUMENT CONTROL

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & create labels per PPP D412-630-034 CHG005

DAS 27
9-89

FEB 22 2017

110

0.00

110

Small Fab

Small Fab

Memo

0.06

Small Fab

Assemble as per dwg D412-630 p.14

Coat all hardware with LPS3 rust inhibitor

A/R LPS3 batch: **123777**

COAT exposed HARDWARE WITH LPS PROCYON.

A/R LPS PROCYON BATCH: **137690****DAS 36**
9-89

17/02/09

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
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Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

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Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC5- Inspect part completeness to step on W/O

0.00

120

QC

Memo

0.00

Quality Control

DAS

38

9-89

FEB 13 2017

130

Pick Kit

0.00

130

Packaging

Memo

0.00

Packaging

FEB 13 2017

DAS

6

9-89

DAS

28

9-89

140

QC4- 100% Inspect kits for completeness

0.00

140

QC

Memo

0.01

Quality Control

DAS

27

9-89

FEB 23 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool # Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

150

150

Packaging

Packaging

Memo

0.00

Identify and pack for shipping as per PPP D412-630-034

Location: _____

PPP Rev: _____

160

160

QC

QC21- Final Inspection - Work Order Release

0.00

Memo

0.02

Quality Control

D3302-042
Part was
disassembled
for a sales
order MF
17-2-24

Ø MF
17-2-24

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Monday, November 21, 2016 11:36:08 AM

153435

Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 11/21/2016**Required Date:** 12/5/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 06-11-08 JLM
 IPP rev B ecn1019, added D2807-041 EC verified by:DD
 IPP rev :C 11.01.06 added route seq ID DD vef:EC IPP REV:D
 13.06.07 PER CHG004 DD vef:JLM IPP REV:E 16.06.23 AS
 PER IIN REV.O DD VEF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN310C8 *AN310C8* Nut		Purchased	No			110	Each	32.0000	2	2			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST331				32					
				<u>m135704</u>				32					
AN3C21A *AN3C21A* Bolt		Purchased	No			110	Each	15.0000	1	1			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST348				15					
				<u>M135671</u>				15					
AN44C7A *AN44C7A* Eyebolt		Purchased	No			130	Each	5.0000	1	1			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST339				5					
				<u>m135704</u>				5					

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : _____							

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				Completed By 					
				Lead hand / Supervisor Approval Verification 					
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐ _____							

Picklist Print

Monday, November 21, 2016 11:36:08 AM

Page 3

Work Order ID: 153435

153435

Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 11/21/2016

Required Date: 12/5/2016

Start Qty: 1.00

Required Qty: 1.00

AN5C15A

Purchased

No

130

Each

45.0000

2

2

AN5C15A

Bolt

**

FEB 08 2017

DAS 28
6 9-89

Location

Loc Qty

Loc Code

over003

20

M136089

20

ST337

25

M135442

25

DAS 27
9-89

AN8C16

Purchased

No

110

Each

7.0000

2

2

AN8C16

Bolt

**

FEB 08 2017

DAS 6
9-89

Location

Loc Qty

Loc Code

ST332

7

M135722

7

D2012-107

Manufactured

No

110

Each

19.0000

1

1

D2012-107

Clevis

**

FEB 08 2017

DAS 6
9-89

Location

Loc Qty

Loc Code

ST001

5

152732

5

WA004

14

149315

3

152732

11

D2803-042

Manufactured

No

110

Each

12.0000

1

1

D2803-042

Bracket Assembly

**

FEB 08 2017

DAS 6
9-89

Location

Loc Qty

Loc Code

ST473

12

148431

12

Monday, November 21, 2016 11:36:08 AM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
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Page 4

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Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 11/21/2016

Required Date: 12/5/2016

Start Qty: 1.00

Required Qty: 1.00

D2804-042

Manufactured No

110

Each

7.0000

1

1

D2804-042

RH Step Fwd Bracket

FEB 08 2017

Location

Loc Qty

Loc Code

GA

4

149349

4

ST474

2

151323

2

ST475

1

148424

1

D2806-1

Manufactured No

130

Each

7.0000

2

2

D2806-1

Bushing

FEB 08 2017

FEB 22 2017

Location

Loc Qty

Loc Code

ST010

7

149371

7

D2806-3

Manufactured No

130

Each

15.0000

2

2

D2806-3

Bushing

FEB 22 2017

FEB 08 2017

Location

Loc Qty

Loc Code

ST011

15

149456

15

D2807-041

Manufactured No

110

Each

20.0000

2

2

D2807-041

Prop Assembly

FEB 08 2017

Location

Loc Qty

Loc Code

FG

2

89606

2

ST011

18

149206

18

Monday, November 21, 2016 11:36:08 AM

Shop Packet Print

Page 4

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Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
						QC / QA Coordinator Approval			

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

Picklist Print

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Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 11/21/2016

Required Date: 12/5/2016

Start Qty: 1.00

Required Qty: 1.00

D2810-5 Manufactured No 130 Each 6.0000 1 1

D2810-5

Strut

**

FEB 08 2017

DAS 6 9-89

DAS 28 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

ST377

6

134899

1

142838

5

D2813

Manufactured No

110 Each

30.0000

2

2

D2813

Washer

**

FEB 08 2017

DAS 6 9-89

Location

Loc Qty

Loc Code

ST011

30

149366

30

D3395-1

Manufactured No

110 Each

80.0000

4

4

D3395-1

Bushing

**

FEB 08 2017

DAS 6 9-89

Location

Loc Qty

Loc Code

ST034

80

149467

80

D3396-1

Manufactured No

130 Each

16.0000

2

2

D3396-1

Spacer

**

FEB 08 2017

DAS 6 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

ST034

16

149446

16

D3562-042

Manufactured No

110 Each

0.0000

1

1

D3562-042

Step Weldment

**

FEB 08 2017

DAS 36 9-89

DAS 28 9-89

DAS 38 9-89

~~B-154471~~

②

B154024 (1X)

Monday, November 21, 2016 11:36:08 AM

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
				OTHER : _____			

Picklist Print

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Work Order ID: 153435

153435

Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 11/21/2016

Required Date: 12/5/2016

Start Qty: 1.00

Required Qty: 1.00

D3672-15 Manufactured No 110 Each 279.0000 5 5

D3672-15

Phenolic Washer

Location Loc Qty Loc Code

ST049 29

149430 29

ST051A 250

151784 250

D3672-17 Manufactured No 130 Each 282.0000 7 7

D3672-17

Phenolic Washer

Location Loc Qty Loc Code

ST050 32

148074 32

ST051A 250

150866 250

D3672-19 Manufactured No 110 Each 232.0000 4 4

D3672-19

Phenolic Washer

Location Loc Qty Loc Code

ST050 232

148075 232

D3672-5 Manufactured No 130 Each 233.0000 7 7

D3672-5

Washer, Phenolic

Location Loc Qty Loc Code

FG 8

44679 8

ST049 225

50354 225

DAS
6
9-89

FEB 08 2017

DAS
6
9-89

FEB 08 2017

DAS
28
9-89

DAS
6
9-89

FEB 08 2017

DAS
6
9-89

FEB 08 2017

DAS
28
9-89

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Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____	

Picklist Print

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Work Order ID: 153435

153435

Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 11/21/2016

Required Date: 12/5/2016

Start Qty: 1.00

Required Qty: 1.00

D3672-7

Manufactured No

110

Each

817.0000

4

4

D3672-7

Washer, Phenolic

Location

Loc Qty

Loc Code

FG

40

129987

25

133986

15

ST049

277

150867

277

ST051A

500

152458

500

MS21043-3

Purchased

No

110

Each

828.0000

4

4

MS21043-3

Nut

Location

Loc Qty

Loc Code

CCK007

400

m135864

400

FG

80

103691

80

FP001

11

m130673

11

GA

45

m133990

45

ST302

223

m135704

223

ST304

69

m131340

69

DAS
6
9-89

FEB 08 2017

DAS
6
9-89

FEB 08 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Work Order ID: 153435

153435

Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 11/21/2016

Required Date: 12/5/2016

Start Qty: 1.00

Required Qty: 1.00

MS21043-4

Purchased

No

130

Each

757.0000

4

4

MS21043-4

Nut

DAS 6 9-89
DAS 28 9-89

FEB 08 2017

Location

Loc Qty

Loc Code

FG

40

104603

40

GA

17

m132803

17

over003

400

m136148

400

ST302

300

m135600

300

MS21043-5

Purchased

No

130

Each

209.0000

3

3

MS21043-5

Nut

DAS 6 9-89
DAS 28 9-89

FEB 08 2017

Location

Loc Qty

Loc Code

FG

20

101418

20

GA

71

116548

71

ST302

118

m135704

18

m135948

100

MS24665-302

Purchased

No

110

Each

89.0000

2

2

MS24665-302

Cotter Pin

DAS 6 9-89

FEB 08 2017

Location

Loc Qty

Loc Code

GA

9

120521

9

ST288

80

m135672

80

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Shop Packet Print

Page 8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐ _____							

Picklist Print

Monday, November 21, 2016 11:36:08 AM

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Work Order ID: 153435

153435

Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 11/21/2016

Required Date: 12/5/2016

Start Qty: 1.00

Required Qty: 1.00

MS24693-C280

Purchased

No

110

Each

20.0000

2

2

MS24693-C280

SCREW

FEB 08 2017

Location

Loc Qty

Loc Code

ST287

20

m135672

20

MS24693-C285

Purchased

No

110

Each

33.0000

1

1

MS24693-C285

Screw

FEB 08 2017

Location

Loc Qty

Loc Code

ST287

33

m135704

33

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Qty -033	Qty -034	Qty -243	Qty -244	Part Number	Description
X				D412-630-033	HELI-ACCESS-STEP™ LH (FOLDING)
	X			D412-630-034	HELI-ACCESS-STEP™ RH (FOLDING)
1		X		D412-630-243	STEP ASSEMBLY LH
	1		X	D412-630-244	STEP ASSEMBLY RH
		1	1	D2012-107	CLEVIS
		1		D2803-041	STA 84 BRACKET ASSEMBLY LH
			1	D2803-042	STA 84 BRACKET ASSEMBLY RH
		1		D2804-041	STA 155 BRACKET ASSEMBLY LH
			1	D2804-042	STA 155 BRACKET ASSEMBLY RH
2	2			D2806-1	BUSHING
2	2			D2806-3	BUSHING
		2	2	D2807-041	GAS SPRING ASSEMBLY (WAS D2807)
1	1			D2810-5	STRUT
		2	2	D2813	WASHER
		1		D3562-041	STEP WELDMENT LH
			1	D3562-042	STEP WELDMENT RH
		4	4	D3395-1	BUSHING
2	2			D3396-1	SPACER
7	7			D3672-5	WASHER (OR NAS1515H5)
		4	4	D3672-7	WASHER (OR NAS1515H5L)
		5	5	D3672-15	WASHER (OR NAS1515H3)
7	7			D3672-17	WASHER (OR NAS1515H4)
		4	4	D3672-19	WASHER (OR NAS1515H8)
		1	1	AN3C21A	BOLT
1	1			AN4C6A	BOLT
1	1			AN4C10A	BOLT
2	2			AN4C15A	BOLT
1	1			AN44-C7A	EYEBOLT
2	2			AN5C15A	BOLT
		2	2	AN8C16	BOLT
		2	2	AN310C8	NUT
		2	2	MS24665-302	COTTER PIN (OR AN380C3-4)
		4	4	MS21043-3	NUT
4	4			MS21043-4	NUT
3	3			MS21043-5	NUT
		2	2	MS24693-C280	SCREW (OR MS24694-C65)
		1	1	MS24693-C285	SCREW (OR MS24694-C76)

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Revision: 0
Date: 16.03.18

Wednesday, February 08, 2017 11:27:09 AM

153435

Item ID: D412-630-034

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Stop *NS2*

Start Date: 11/21/2016 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 12/5/2016 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

[illegible]

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & create labels per PPP D412-630-034 CHG005

DAS
21

9-89

FEB 08 2017

110

0.00

110

Small Fab

Small Fab

Memo

0.06

Small Fab

Assemble as per dwg D412-630 p.14
Coat all hardware with LPS3 rust inhibitor
A/R LPS3 batch: _____
COAT exposed HARDWARE WITH LPS PROCYON .
A/R LPS PROCYON BATCH: _____

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____				
Misidentified ☐	Past Due ☐					